

## ABSTRACT OF THE INVENTION

The invention provides multifunctional fusion constructs which are rapidly incorporated into a macromolecular structure such as a phycobilisome such that the fusion proteins are separated from one another and unable to self-associate. The invention provides methods and compositions for displaying a functional polypeptide domain on an oligomeric phycobiliprotein, including fusion proteins comprising a functional displayed domain and a functional phycobiliprotein domain incorporated in a functional oligomeric phycobiliprotein. The fusion proteins provide novel specific labeling reagents.

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